Are university collections and museums still meaningful? Outline of a research project

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Resumo

A investigação museológica sobre a importância das colecções universitárias e sobre o papel contemporâneo dos museus universitários é ainda escassa. Esta comunicação pretende esboçar um projecto de investigação, a desenvolver nos próximos anos, que tem como objectivo principal abordar estes tópicos no contexto das universidades públicas europeias e, em particular, no caso português. A comunicação apresenta igualmente alguns resultados de uma pesquisa prévia, conduzida em 2000, em Portugal (apêndice) e num número restrito de museus universitários europeus.

Abstract

The contemporary significance of university collections and the changing role of university museums has not been the subject of thorough scientific research. This paper presents the outline of a research project to be carried out during the next few years, which seeks to place these and other topics in the perspective of recent developments in public universities in Western Europe in general, and Portugal in particular. The communication also presents the results of an inquiry among Portuguese u-museums and collections (listed in the appendix) and a number of European u-museums, aimed at establishing a context for the research.

Introduction

Perhaps there is a crisis in university museums. In Portugal, there are certainly signs of difficulties, but recently also a few signs of hope. Although it is tempting to merely focus on problems, I will try to avoid this temptation and speak in more general, hopefully optimistic terms. I have always been captivated by the role of u-museums in contemporary society: what are their functions? In what way do these functions differ from past functions? In what way do these functions intersect those of contemporary universities?

These are complex questions, with a large number of parameters, making it impossible to provide straightforward answers. This does not mean, of course, that the reality of u-museums is unintelligible. On the contrary, we can and should do more in order to understand the nature of these issues. This Committee's role is crucial in this respect.

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I have to admit that I consider university museums different from other museums[1], although one may indeed argue that all museums are different. However, I do not think that u-museums are only different as far as management, organisation, ownership of collections or exhibitions are concerned. Differences lay at the very heart of what a museum is – differences lay in objects. Although we can of course find apparently similar objects in other museums, they owe their existence in university museums to different reasons. Through time, u-museums' incorporation policies and the use of collections were closely linked to the main mission of universities – teaching and research (DE CLERCQ 2001). U-museums are the only keepers of the material evidence of how scientific knowledge was constructed and taught, and of when the physical archiving of nature started.

This specificity is also suggested by the creation of organisations such as the University Museums Group (UMG) and the University Museums in Scotland (UMIS) in the UK, the Council of Australian University Museums and Collections (CAUMAC), as well as the long awaited creation of this ICOM Committee, UMAC. Journals have been devoted to the topic[2] and a European project on Academic Heritage was designed and implemented and is currently in progress[3]. Specificity has also been the subject of recent papers on u-museums (e.g. STANBURY 2000, DE CLERCQ 2001). These examples indicate that although very different among themselves, university museums share policies, methodologies, practices, and standards – they also have common aims, concerns and needs. They are united in diversity.

Specificity discourse, however, can be mistaken for arrogance – suggesting that university museums, being specific or special, are *better* than other museums. I do not share this view. On the contrary, I defend closer bonds between u-museums and other museums. Museums are socially perceived as cultural institutions and universities as scientific institutions. University museums were always divided between these two worlds. Statements like "we are playing in the wrong league"[4] or "Sometimes I have the impression of being a tennis player lost in the middle of a rugby team"[5] are an indication of this 'divorce'. From my point of view, I see no particular advantage of deepening the abyss between u-museums and non-university museums or, more generally, I see no reason whatsoever to separate Science from Culture. When I use the word *specific*, I really do mean specific, as in distinct, peculiar, but without particular values attached.

This project is centred on the specificity of u-museums in Europe, as far as functions are concerned. In particular, I will focus on teaching and research for reasons I will try to explain. Generally speaking, the project aims at clarifying to what extent teaching and research activities in u-museums: i) evolved through time; ii) influence incorporation policies; iii) determine the use of collections; iv) reflect teaching

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[1] I include under the designation of 'other museums' all museums that are not university dependent.
[2] For instance, *Museums Journal* No. 86 (1986) and, more recently, a double issue of *Museum International* (2000 and 2001).
[3] The European Network 'Academic Heritage and Universities – Responsibility and Public Access'. For details on the project itself and on partners, see: www.universeum.de.
[4] Anders Ödman, Director of the History Museum of the University of Lund (Sweden), quoted in the Bulletin of the European Museum Forum (January 2001). Consulted 4 June 2001, in stars.coe.fr/museum/bulletin_e.htm.
[5] An anonymous museum curator quoted in WEEKS (2000: 10).

and research activities in universities (outside the museums).

Of course, I am aware that many u-museums and collections do not fit into this study. Some objects are incorporated for commemorative, decorative or ceremonial reasons[6], which in itself is a sign of the complexity of incorporation policies – criteria other than teaching or research can lay behind the existence of u-museums.

Methodologies remain under discussion, but they are likely to include interviewing u-museums staff, collecting documentation, and site visits. At the moment, I am finalizing a survey on Portuguese u-museums and collections and data are being collected for comparison with other studies carried out elsewhere in Europe.

The need for more research

Since the 1960s, but with more global impact since the 1980s, much has been written about university museums, especially natural history museums[7] – probably because these felt threatened more than anyone else by the so-called 'crisis'. Authors like Nicholson (1991), Albrech (1993), Seymour (1994), Birney (1994), Steigen (1995), Mearns & Mearns (1998), Mares & Tirrell (1998), Krishtalka & Humphrey (2000), among others, suggested new directions for natural history collections. Meetings like the 'Natural History Museums: Directions for Growth', held in 1988 in Kansas City (Cato & Jones 1991) and 'The Value and Valuation of Natural Science Collections', in 1995, in Manchester (Nudds & Pettitt 1997) contributed to deeper reflection on contemporary issues facing natural history museums, mostly university dependent. There is also considerable literature on the more general problems concerning university museums, e.g. Bass (1984), Armstrong *et al.* (1991), Stanbury (1993), Arnold-Foster (1994, 1999), Kelly (1998, 1999), Arnold-Foster & Weeks (1999). In England, Scotland, Australia and the Netherlands, among other countries, governmental agencies wrote reports and issued recommendations which eventually resulted in policy change[8]. Although all these steps are instrumental to the reformulation of the contemporary mission of u-museums, I believe that there is also need for more in-depth research. Much more needs yet to be studied and published.

Museology provides the context for this research. Studying the functions of museums or the specificity of collections does not fall under the umbrella of subject-matter disciplines, i.e. the disciplines represented in the museum. It is not the object of study of archaeology, anthropology, or physics. It is one of the objects of study of museology. Although this plain statement requires justification, I will not try to do this here and instead accept it as a postulate.

Let us now look more closely into the importance of teaching and research in u-museums. I will also briefly discuss some aspects related to a possible museology that is specific to the u-museums' context and finish with discussing several issues arising from these reflections.

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6 James Hamilton, quoted in Kelly (1999: 20) groups u-collections into 4 groups: ceremonial, decorative, commemorative and learning.
7 I am including under the designation of 'natural history': botany, zoology, mineralogy and geology, palaentology and anthropology.
8 E.g. the direct non-formula funding in the UK and the museological policies of the University of Macquarie, Australia, approved by the senate and the Council of Vice-Chancellors of New South Wales (cf. Macquarie University Council. *Policy on University Museums and Collections*. 13 December 1996, unpublished document available on line at www.lib.mq.edu.au/mcm/.

The functions of u-museums

ICOM's definition states that museums in general have five functions – collecting, research, preserving, interpreting and exhibiting. According to WARHURST (1984) this definition, in essence, applies to u-museums as well, although those may place different emphasis on different functions. However, university museums are functionally special in two different aspects: they have an extra function – teaching – and they establish a different approach towards research.

Teaching

Education has always been one of the main purposes of all museums. As far as general museums are concerned, education is a term used in its broadest, even 'potential' sense. As Richard Grove put it, "museums have the power to quicken the mind and make it work in new ways, to exalt the spirit, to open avenues of perception and discovery [to visitors]" (GROVE 1984: 16). Needless to say, this statement also applies to university museums. However, in university museums education is frequently used in a more precise and determined sense – it means teaching and learning[9], formal university training (with classes inside the museum facilities), professor-curators, laboratories and collection-based curricula. Indeed, undergraduate teaching was one of the original functions of university collections (WARHURST 1984).

One of the aspects that increase the complexity of university museums is terminology. UMAC has an important role here as well, probably together with ICOFOM. As far as 'teaching' is concerned, it is crucial to distinguish between 'teaching collections' and 'collections of teaching objects'[10]. Actually, the same goes for research but we will come to that in a minute.

Objects were always used in teaching and learning. Looking at a functioning steam engine or handling a skin of a swallow is considered to offer more insight than looking at drawings in a book. Therefore, objects are particularly important when learning a subject – whether this is Astronomy, Physics or Zoology. In Physics or Chemistry, instruments are supposed to work well and to be modern and in Zoology or Mineralogy specimens have to be representative and in good condition. Moreover, Zoology teachers do not want just one swallow – they want several: young and adults, collected at different times of the year, different localities, etc. In a similar way, the same applies to Physics: teachers have to guarantee the widest range of equipment on a given topic.

Through time, these objects became the university collections that we are familiar with. With a difference – an assembly of Physics apparatus is only considered 'a collection' once the material has become obsolete or out of order; it is only then that instruments are incorporated in the local department or faculty museum[11]. Zoology material, on the other hand, is considered a 'collection' right from the beginning. The former are 'collections of teaching objects' and the latter 'teaching collections'. The

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9 Cf. chapter 17 – Museological Functions, in PETER VAN MENSCH (1992). *Towards a methodology of museology*. Unpublished PhD thesis, University of Zagreb.

10 Clarification on the term 'collection' itself is also important, particularly in the u-museums context. Although requiring adaptation to the u-museums context, some insight could probably be drawn from material culture studies.

11 This is not completely precise. Physics teachers do not acquire instruments by chance – they systematically select objects in order to cover the explanation of a given topic. It depends on what we consider a *collection*, but in view of this process an assembly of Physics instruments is, at least, a proto-collection. For more on this, see e.g. TURNER (1995).

importance of the steam engine – or, say, a thermometer – *for teaching and learning activities* declines with time once more modern equipment fulfils the pedagogical mission better while the importance of the swallow remains as time passes – or even increases in the case of rare or extinct organisms.

Research

Similar to teaching and applying the same reasoning, we could speak of 'research collections' and 'collections of research objects'. As with teaching collections, we are more likely to find research collections in Archaeology and Geology than in Chemistry or Astronomy. This is because the epistemological significance of the swallow to Biology is different from the importance of the obsolete steam engine to Physics. In other words, while the swallow conveys scientific information[12] to Biology, the obsolete steam engine does not convey any scientific information to Physics. This is a particularly interesting aspect – worth of more research – because the obsolete steam engine does not have epistemological significance to Physics, but indeed it has to the History of Physics. The distinct nature of these collections leads to two consequences: i) distinct views of research within different university museums (e.g. natural science and 'exact' science university museums); and ii) a functional shift, with the transformation of some museums into history museums, once their collections stop conveying scientific information due to lack of use.

Apart from the need to clarify research philosophies and methodologies between different university museums, another level of understanding is required. Since ICOM's definition explicitly considers research as functionally intrinsic to *all* museums, the next question worth asking is: what type of research and in what way are university museums specific?

University museums have a long tradition in fundamental and applied research. Research objects – say, archaeological artefacts or fossil bones from a given excavation – are systematically collected, incorporated and studied with the purpose of improving our understanding of the world we live in. These objects owe their sometimes ephemeral existence as 'museum objects' to research – not to aesthetics, not to rarity per se (although this can coincide). In universities all over the world, thousands of objects are abandoned once they gave to science all they could. Or even destroyed while studied! As Steven de Clercq puts it, "De-accessioning is [...] an exception in any well-run general museum. By contrast, in many research collections, selection and de-accessioning should be part of the professional practice of curators" (De Clercq 2001)[13].

This transient relationship established with objects in research collections indicates that research is highly valued in university museums, even more than the eternal preservation of objects (De Clercq 2001). Obviously, type natural history specimens are exceptions to the rule. Whether this research is *the* functional research ICOM's definition refers to

[12] Scientific information is a concept introduced by Ivo Mareovic, as opposed to 'cultural information'. According to Mareovic, quoted in Peter van Mensch's PhD thesis, the disciplines represented in the museum make use of scientific information, while museology makes use of the cultural information drawn from objects.

[13] Incorporation policies and de-accessioning are crucial and make all the difference. While other museums may incorporate objects for reasons depending on their scope and mission they always do so because the object has an intrinsic 'museological' value: the object should be removed from its environment and be preserved for the benefit and education of future generations. The concept of 'museological' value in u-museums may not coincide with this.

remains uncertain and subject to intense debate[14]. To complicate matters further, some people believe that research should not take place in [general] museums, but in universities – a statement that grants u-museums a special role, yet to be fully understood.

As far as a specificity of u-museology is concerned, more has yet to be studied. As seen above, university museums have specific aspects related to their functions. Eventually, the answer is likely to depend on the approach we take towards Museology – institution-oriented, object-oriented or function-oriented. Museology itself is still far from being accepted as a theoretical-synthetical science, with its own body of knowledge and its own derived methodologies. A specific terminology, however, is a *sine qua non* condition of a possible specific museology. There are signs that museology in the university context assumes a specific terminological body – a set of common concepts difficult to find elsewhere. For instance, expressions like 'scholar-curator' (as opposed to 'professional curator'), 'faculty-curator' or 'curator-professor', 'study collection', 'reference collection', 'research collection', 'teaching collection', 'public exhibition' *vs.* 'reserved exhibition', just to mention a few, are long-established within the u-museums community. Nevertheless, we should try to understand if this set of words is the expression of a specific terminological body or if they merely stand for professional jargon.

Some of the many questions left unanswered

In short, u-museums are functionally specific: they have at least one more function than other museums – university training – and they consider research intrinsic to their mission. However, more investigation has to be done on this matter, because the term research has its own pitfalls and is often used with different meanings. Some topics still to be developed as far as these two functions are concerned are:

1. The distinction between research *in* the museums and research *of* the museums and their functions – we should be more aware of the subtle differences between the two. We should also have a better understanding on how to cope with ICOM's definition (or specify the definition as far as u-museums are concerned?).

2. A problem related to the previous is that a clearer distinction between subject-matter research and museological research is also required. Both develop a specific relation with the museum collections and the museum as an institution and their purposes are frequently confused. University museums, at least in Portugal, tend to consider fundamental and applied research in the subject matter disciplines as the only research that can be called 'research'. Around a year ago, a university museum director in Portugal was complaining of not having qualified staff for 'museum' [sic] purposes. Understanding that he meant public exhibitions, I asked him why he did not hire education officers, or museologists. He answered plainly: "Museologists?? With this shortage of staff?

[14] Cf, for example ICOFOM Study Series 1 and 12.

Never! Whenever I have an opportunity – which is rare – I hire researchers [sic], not museologists. Museologists are a luxury I cannot afford. At this pace, we will not have a museologist within the next 60 or 70 years!".

3. Furthermore, due to lack of conditions and resources, many university museums are neglecting teaching and research in the subject-matter disciplines. The Natural History Museum of the University of Porto abandoned the word 'research' from its mission statement in 1995. Between November and December 2000 I asked 39 university museums and collections from Belgium and the UK whether there was *any* research on their collections happening at the time. I received 17 positive replies (out of a total of 30), but only one from a natural history museum. Among some of the answers were[15]:

"[Just] Students' studies. No real scientific research as such (there has been in the 19th century)".
Belgium, 6 December 2000

"[Only] Occasionally, due to lack of researchers interested".
Belgium, 8 December 2000

"It has been. Presently not".
Belgium, 11 December 2000

"There has not been any research done on the collection. It is a teaching and learning resource, and as such it is in constant use by academic staff and students".
UK, 14 December 2000

"Research has been done in the past on some of the vertebrate material though by whom and where [it was] published I do not know".
UK, 15 December 2000

"No research. Unfortunately, the situation of the invertebrate collection in [...] is dramatic!"
.Belgium, 26 February 2000

4. The role of university collections on teaching and learning is also changing. In many universities, disciplines like Systematics and Taxonomy were eliminated from the graduate studies curricula in the 1980s. A Portuguese u-museum director confessed that he now regrets having promoted this state of affairs by orienting students towards Ecology and Genetic studies. Although this trend is likely to be reversed in the future, it endangers collections putting them at risk of dispersion and neglect.

5. A more general issue is directly connected with the changing mission of universities, and how it is influencing u-museums. Universities are very dynamic institutions, suffering constant change due to internal and external social and economic pressures. Museums, on the contrary, are by nature institutions of 'permanence' and they tend to resist sudden transformations. This apparent 'conflict' is of great interest because it is unlikely to happen in other museums.

6. One last aspect related to the relationship with the university. In this paper, I focused exclusively on research and learning related to collections. Yet, another interesting aspect to be clarified in this project study is related to exhibitions. Many u-museums participate in the promotion of scientific literacy by producing exhibitions that present research carried out within the university (De Clercq 2001). Exhibitions in u-museums would require a separate study but I would like to shed some light on their

[15] I'll keep the names of the museums concerned confidential, although I may disclose the country and that they are all Zoology museums.

role as carriers of scientific research to broader audiences.

This project aims at looking deeper into and clarifying the specific functions of teaching and research in u-museums and collections. In spite of all the differences, all collections are academic heritage because they provide material evidence of the long-lasting human quest for knowledge. However, a Zoology u-collection is different from a Fine Arts u-collection. Or, to use Steven de Clercq's expression, "a Bird of Paradise is very different from a Stradivarius" (DE CLERCQ 2001). Generally speaking, we could perhaps divide university collections into two major groups, according to their role towards the subject-matter discipline: a) collections that are – or have the potential to be – epistemologically representative to their subject-matter discipline (where I would risk including Mineralogy and Geology, Zoology, Botany, Anthropology, Anatomy and probably Archaeology) and b) collections epistemologically representative for the *history* of their subject matter disciplines (Physics, Chemistry, Astronomy, perhaps Fine Arts, among others). The nature of these differences, among other factors, determines the way collections are used, known, and ultimately, protected.

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Appendix

University	Museum or Collection	Observations
University of Beira Interior (Covilhã)	**Wool Museum**	Dependent on the Reitoria www.ubi.pt/museu/museu.htm
University of Coimbra	**Museum of Physics**	Faculty of Sciences www.fis.uc.pt/museu/index.htm
	Natural History Museum:	Faculty of Sciences & Technology www.fct.uc.pt/ www.uc.pt/botanica/jardim.htm
	Museum of Anthropology	
	Museum of Zoology	
	Botanical Garden and Museum	
	Museum of Mineralogy and Geology	
	Academic Museum	Reitoria
	Sacred Art Museum	Reitoria
	Museum of the Pathological Anatomy Institute	Faculty of Medecine
	Collection of the Astronomical Observatory	Faculty of Sciences & Technology www.astro.mat.uc.pt/obsv/museu.html
	Archeology collection	Institute of Archaeology
	Ethnology collection	Existence to be confirmed
	Collection of the Faculty of Pharmacy	Existence to be confirmed
	Collection of Experimental Psychology	Existence to be confirmed
University of Lisbon	**Museum of Science**	Reitoria www.museu-de-ciencia.ul.pt
	National Museum of Natural History:	Reitoria www.ul.pt/mnhn.html www.jb.ul.pt/
	Museum of Anthropology and Zoology	
	Botanical Garden and Museum	
	Museum of Mineralogy and Geology	
	Collection of the Faculty of Medicine	Faculty of Medecine
	Collection of the Faculty of Pharmacy	Faculty of Pharmacy
	Art Collection	Faculty of Fine Arts
	Collection of instruments of the Astronomical Observatory	Faculty of Sciences www.oal.ul.pt/oal/
University of Minho (Braga)	**House-Museum Nogueira da Silva**	Reitoria www.uminho.pt/unidadesculturais/museunogueirasilva.htm
University of Porto (*)	**Museum of Science**	Faculty of Sciences
	Natural History Museum:	
	Gallery of Mineralogy Montenegro de Andrade	
	Gallery of Paleontology Wenceslau de Lima	
	Gallery of Archeology&Pre-History Mendes Corrêa	
	Laboratory of Zoology Augusto Nobre	
	Botanical Garden and Museum	
	House-Museum Abel Salazar	Reitoria
	National Museum of the History of Medicine Maximiano Lemos	Faculty of Medicine
	Museum of the Faculty of Architecture	Faculty of Architecture
	Museum of Fine Arts	Faculty of Fine Arts
	Anatomy Museum	Faculty of Medecine
	Collections of engravings of Francesco Bartolozzi	Faculty of Sciences (Library)
	Collection of the Faculty of Engineering	Faculty of Engineering
	Collection of the Faculty of Pharmacy	Faculty of Pharmacy
	Collection of the Geophysical Institute	Faculty of Sciences
	Collection of the Astronomical Observatory	Faculty of Sciences
Technical University (Lisbon)	**Royal Botanical Garden of Ajuda**	Higher Institute of Agronomy
	Herbarium Prof. João de Carvalho e Vasconcellos	Higher Institute of Agronomy www.isa.utl.pt/herbario/
	Collection of scientific instruments	Higher Institute of Technology
University of Trás os Montes e Alto Douro (Vila Real)	**Botanical Garden**	Existence to be confirmed
	Museum of Geology and Mineralogy	Section of Geology (Area of Exact, Natural & Technological Sciences) www.utad.pt/Seccoes/geologia/Weddepmuseu.html

List of Portuguese university museums and collections (data from July 2001, except web site addresses, which were updated for this issue). Some museums have official existence, i.e. are mentioned in the university or faculty statutes, while others do not.
The *Reitoria* is the highest scientific, pedagogical, financial and administrative body in a Portuguese university.
(*) All the museums of the University of Porto can be seen atwww.up.pt/conhecaup/museus/museus/museus.html.